

WRITING A LIBRARY TECHNOLOGY PLAN

ASSISTANCE FOR NEW HAMPSHIRE LIBRARIES

INTRODUCTION.....	2
GETTING STARTED	2
COMPONENTS OF THE PLAN.....	3
TECHNOLOGY PLAN OUTLINE	4
LIBRARY INTRODUCTION.....	4
IDENTIFYING AND ASSESSING TRENDS	4
ESTABLISH CLEAR GOALS AND A REALISTIC STRATEGY	4
PROFESSIONAL DEVELOPMENT STRATEGY	5
INVENTORY/ASSESSMENT	5
SUFFICIENT BUDGET AND IMPLEMENTATION PROCESS	6
EVALUATION PROCESS.....	7
SUMMARY AND APPENDICES	7
TECHNOLOGY PLANNING SIMPLIFIED.....	7
COMPLETING THE TECHNOLOGY PLAN.....	7
APPENDICES	9
APPENDIX A – TECHNOLOGY PLANNING ON THE LITE SIDE	
APPENDIX B – TECHNOLOGY PLAN FOR HOWE LIBRARY 1999-2001	
APPENDIX C – HAMPSTEAD PUBLIC LIBRARY TECHNOLOGY PLAN 2000-2002	
APPENDIX D – CHESTERFIELD LIBRARY TECHNOLOGY PLAN 1999-2001	

Introduction

Successful implementation of new technology in your library begins with a well-developed plan. It serves as an overview of where your library currently stands as well as providing a blueprint for how technology assists the library in meeting its mission. It is also a necessary document to justify the budget, meet library standards, and apply for grants or discounted services. A well written technology plan is an important component in meeting the long range plans of the library.

The technology environment of New Hampshire libraries varies greatly. This guide explains the criteria required in an acceptable technology plan. This criteria will help you develop a plan that will be a valuable planning document. Three New Hampshire plans may be found in the appendix as examples to help you in developing your plan.

Getting Started

For many librarians, writing a technology plan is a daunting task. While the technology plan is an important document that cannot be ignored, do not attempt to write it in a vacuum. Before you begin, consider these elements to create a successful plan.

- ◆ **Vision, Mission, Goals and Objectives**

What is in the library's Long Range Plan? No technology application should be considered if it doesn't meet the long range plans for the library. Technology should only be considered if it helps the library meet its stated objectives. Can you answer questions about the library's future services? What does the public want? What does the staff see as important to helping them do their jobs? Does the technology proposed improve library services?

- ◆ **Establish a committee**

The committee assists in gathering information and developing a technology vision for the library. The committee should have representation from all interested parties including staff members, trustees, and the general public. Bring in partners such as your school district, town officials, business organizations, or volunteer groups to help develop the plan.

- ◆ **Services drive technology acquisition**

Consider what your library's technology needs are and how they can be met. Technology should help the library be more efficient, effectively deliver current services, and allow the addition of new services.

Keep current with technology trends in librarianship. Read popular and library literature for information relative to new applications. Find out what other libraries are doing. You don't need to be the one with the expertise to install the hardware/software, but you can't plan for it if you don't know it exists.

Components of the Plan

Libraries with current long range plans are at a distinct advantage in developing a technology plan. The library has already clearly articulated its mission and set clear goals and objectives. Specific services and business functions of the library have been outlined and new services desired by the staff and community have been identified. The impact of specific technology and telecommunications to this plan can be added as an addendum.

Libraries without a long range plan need to address the mission, goals and objectives of the library before it can discuss how technology will affect the current services and business functions of the library. Without a long range plan, the library has not identified any enhancements to current services or additional services desired by the staff or community.

The State Library requires five major components to have an approved technology plan. They are the same requirements of the Universal Service Program (E-Rate) of the Schools and Libraries Division. A plan approved by the State Library will be considered certified for purposes of E-Rate applications.

While your plan may cover any realistic time period, consider a three year plan as ideal. Five years, in regards to technology, is usually too long a period while one year usually doesn't cover the scope of projects the library may be involved in accomplishing.

The plan must:

1. **establish clear goals** and a **realistic strategy** for using information technology and telecommunications to improve library services.
2. **include a professional development strategy** to ensure that library staff knows how to use these new technologies to improve library services.
3. **include an inventory and assessment** of the information technology and telecommunications services that are needed to improve library services.
4. **provide for a sufficient budget and implementation process** to acquire and maintain the hardware, software, professional development, and other services that are needed to implement the strategy.
5. **include an evaluation process** that enables the library to monitor progress toward the specified goals and make midcourse corrections in response to new developments and opportunities as they arise.

These criteria create a comprehensive plan that outlines how your library plans to use technology to improve services.

Technology Plan Outline

Use this outline as a basic template of your technology plan. While the State Library does not require a particular format for your plan, each of the criteria must be clearly and thoroughly addressed.

Library Introduction

While not a requirement, provide an introduction to the library for those unfamiliar with it. Describe the library, the demographic area served, and an explanation of who was involved in the development of the plan. Remember this plan will be used by more than those already familiar with all aspects of the library such as library staff or trustees. Consider that you may submit this plan to budget committee members or town officials, who may not visit the library, to justify budget increases, vendors for assistance in meeting objectives outlined in the plan, or donors relative to grant applications. Providing an introduction places the rest of the plan in context and makes it easier for someone with limited knowledge of the library to know the constraints under which you operate.

Identifying and Assessing Trends

This section provides an understanding of library services in a broader context. What types of resources and services are being planned or implemented in other libraries and what are the potential impacts on your library? Clearly identify specific trends in library applications, especially those your library may consider adopting for local use. Expansion of services may be driven by specific trends that can be clearly identified and articulated. Online resources, electronic books, and delivery of reference services are areas where trends in the industry may have an impact on future developments within your library.

Establish Clear Goals and a Realistic Strategy

This is the justification section of your plan. Describe the vision and mission of your library. Detail not only services currently offered but those you want to offer in the future. Explain how various technology application can improve those services. If your library has a long range plan, you have already articulated much of this information but need to include the impact of technology.

Provide information that demonstrates how the library's current services and functions can be improved and/or new services offered using technology. This section should include not only specific library services such as collection development, interlibrary loan, and cataloging but basic office functions as well. Include information on whether or not services are to be shared within the library, with outside partners (e.g. school library, town hall, etc.) or remote access for patrons. Do not forget to include the telecommunications connections needed to accomplish this.

Answer questions such as

- how does technology fit in with the library's overall mission?

- what is the role of technology in improving specific library services?
- what does your future library technology environment look like?

Include measurable goals and objectives in your plan. List major accomplishments or activities to be improved or implemented using technology. It is useful to list them in priority order. Then include the strategies or objectives that must occur to accomplish the goal.

Professional Development Strategy

Do not forget the impact technology has on your most important resource, the human resource. This is a critical but often ignored part of implementing technology within the library. You must ensure that the library's staff understands how to use the technology to improve library services. How does the acquisition or upgrade of technology applications benefit the library? Are the staff familiar with it or able to use it appropriately? The inability of the staff to use the technical impacts negatively on your library and its services.

Develop a specific strategy relative to providing training opportunities for staff. These are the people who will implement the new or enhanced technology into library services and they have a critical need to know how to do it. A strategy is more detailed than "staff will receive training as necessary". The professional development component should identify

- areas and applications where training is required (*e.g. basic computer skills, SuperCAT, Internet*)
- staff positions that require training (*e.g. director, reference librarian, ILL staff*)

Training needs include new services or an enhancement to a current one. For example, if the library installs a local area network (LAN), only certain staff members will require training to troubleshoot the system while all staff members will require training to use the LAN. Include in your plan places you can send staff for training opportunities. These places may include:

- New Hampshire State Library
- NELINET
- NHLA sponsored programs
- Library Co-op programs
- local colleges or universities
- distance learning opportunities
- other workshops offered locally (*e.g. school districts, computer training schools*)

Inventory/Assessment

The plan established certain goals and objectives relative to how technology can improve library services. Now is the time to inventory what the library owns and identify discrepancies between the goals and current available resources.

Begin with the inventory of what is currently in place within the library. List each item in sufficient detail to provide an overview of the strengths and weaknesses of your current configuration. Identifying each piece of equipment provides a quick overview of the strengths and weaknesses of the technology already in place within the library. Include information such as:

Personal computers / terminals

- equipment identifier (how the library identifies the equipment, e.g. id #, specific name)
- location in library
- processor type and speed/RAM/Hard Drive
- printer
- other options (e.g. CD-ROM, Tape Drive, Sound Card, etc.)

Telecommunications lines

- number of basic phone lines
- number and speed of data lines

Software, CD-ROM, and online products

- communications (e.g. *ProComm*, *pcAnywhere*, etc.)
- Internet (e.g. *web browser*, *telnet*, *e-mail*, etc.)
- business applications (e.g. *MS Office*, etc.)
- specific applications (e.g. *encyclopedias*, *indexes*, etc.)

Other

fax machines
microform reader/printers
electrical capacity within the building
maintenance contracts for any equipment

Once the inventory is complete, begin the process of assessing whether the current equipment can be used to help you meet your goals and objectives. What are the discrepancies between what you want to accomplish and the inventory at hand? State the strengths and weaknesses of the current technology environment. Questions to ask include

- Do you have the hardware/software necessary for any new services?
- Do you have a sufficient number of appropriate workstations for current or future applications?
- Do you need new or upgraded software packages?
- Do you have adequate arrangements for maintenance of equipment?
- Is the technology available accessible to persons with disabilities?

Sufficient Budget and Implementation Process

Identify your priorities and develop a timeline and tentative budget to accomplish your goals and objectives. The budget should be sufficient to acquire and

maintain the hardware, software, and professional development needs outlined in the plan. Include costs of regular maintenance and upgrades in your operating budget as well. For example, the cost of a laser printer also includes the ongoing cost of laser printer cartridges and paper. Consider creating a chart or spreadsheet to compile this information.

Do you anticipate funding parts of the plan from grants or other outside sources? If so, identify them. LSTA funding, E-Rate discounts, grants, friends groups, and other sources are all possible sources of funding.

Evaluation Process

Writing a plan is a major step but evaluating it and making any adjustments necessary is also an important component. Even the best plans can not take into account unexpected changes. Evaluating and updating the plan allows you to be able to react to emerging trends and technologies, new opportunities, and other events that may change your stated goals and objectives. Plan to bring the committee together on a regular basis to review the plan and your accomplishments. Make adjustments as necessary.

Summary and Appendices

If your plan is lengthy, consider adding an executive summary that highlights the important aspects of your plan. In addition, attach any documents relating to technology within your library you feel may add to the reader's understanding of your library.

Technology Planning Simplified

Every library needs a technology plan. If your library has minimal technology needs, a simple framework has been designed to help you with the planning process.

Minimal technology needs are defined as a library that does not have a library network or online catalog of any type. Long Range Planning for such services may have begun but will not be implemented within the time span covered by the simple plan. If your library meets this definition, consider using *Technology Planning on the Lite Side* included in Appendix A.

Technology Planning on the Lite Side provides a basic framework to allow a library to develop a simple plan. In paragraph format, it requires a library to answer ten questions about the status and implementation of technology in the library. The ten questions are based on the same criteria found in the *Components of the Plans* and the *Technology Plan Outline* that are required of more comprehensive plans.

Completing the Technology Plan

Once your plan is finished, it must be approved by the State Library. Certification of the plan is required for libraries applying for Library Services and Technology Act (LSTA) funding as well as programs such as Universal Services for Schools and Libraries (E-Rate). Questions about the process and copies of the plan may be directed to

Theresa Paré
NH State Library
Electronic & Government Information
20 Park Street
Concord, NH 03301
603/271-2143

Appendices

Appendix A – Technology Planning on the Lite Side

Appendix B – Technology Plan for Howe Library 1999-2001

Appendix C – Hampstead Public Library Technology Plan 2000-2002

Appendix D – Chesterfield Library Technology Plan 1999-2001

TECHNOLOGY PLANNING ON THE LITE SIDE

This planning guide is intended for libraries with minimal technology needs. It provides an easy question and answer framework to allow libraries to develop a simple plan. Please consult Writing A Library Technology Plan: Assistance For New Hampshire Libraries available at <http://www.state.nh.us/nhsl/egir/erate.html>

Basic Information about Your Library

- Library Name:
 - Library Director:
 - Person responsible for managing library's technology
(if different from the director):
 - Library Address:
2. Please describe, in a general way, the overall mission of the library. What goals and objectives do you have to meet the mission?
 3. Please write a brief statement or short paragraph that describes, in a general way, how technology will help your library accomplish its service goals.
 4. Discuss how your library will integrate technology into service to patrons. Be specific about integration during the next year and provide more general information about the next three to five years.
 5. Provide a list of the computer equipment and software currently in use in your library. Describe briefly how this equipment is now used.
 6. What equipment, software, or other technology do you plan to purchase during the next year? Describe briefly how these new acquisitions will be used to improve library services to patrons.
 7. Discuss the library's ability to fund the purchase of the new equipment, software or other technology.
 8. Discuss the library's ability to fund the maintenance of all technology, including any new acquisitions, used within the library. Include any service/maintenance contracts you have or are planning to purchase.
 9. Discuss any plans your library has for training staff in technology issues and/or for teaching patrons to use technology tools.
 10. Explain how your library will evaluate this plan and make any adjustments necessary

Date Technology Plan approved by library's Board of Trustees

Dates Technology Plan is reviewed and updated by the Director and Staff

NHSL gratefully acknowledges the Montana State Library for their work developing this planning guide

Technology Plan for Howe Library 1999 - 2001

**Accepted by the Trustees of the Howe Library Corporation
June 24, 1999**

**Endorsed by the Hanover Board of Selectmen
September 13, 1999**

**Howe Library
13 East South Street
Hanover, NH 03755**

603-643-4120

howe.library@valley.net

www.thehowe.org

Howe Library Technology Plan 1999 - 2001

I.	Introduction	page 1
II.	The Role of Technology at Howe Today	page 3
III.	Technology Planning for the Future: Assessing Trends	page 5
IV.	Mission of Howe Library and Long Range Technology Objectives	page 8
V.	Implementation	page 12
VI.	Evaluation	page 13

Appendix

- A. History of Technology at Howe**
- B. Inventory of Hardware and Software**
- C. Current and Future Computer Workstations**
- D. Capital Improvement Program**

Howe Library Technology Plan 1999 - 2001

I. Introduction

Community Demographics Library History and Governance

In 1900, Howe Library was established as a public library in Hanover, N.H. as a gift from Emily Hitchcock Howe. Mrs. Howe dedicated the Library with "a prayer that this library may prove a blessing to this community to the remotest generation." The community today has an estimated population of 9,456, which includes the resident undergraduates at Dartmouth College. The Town has an interstate school district that combines students from Hanover and Norwich, VT in grades seven through twelve. Large proportions of the residents work in the community, many in professional positions. Beginning in September 1999 and culminating in April 2000, community events and activities will celebrate the Centennial of Howe Library.

From its founding to 1972, the Howe Library Corporation managed the Library and established its operating budget. In 1973, after providing increasing support over the years through appropriations at the town meeting, the taxpayers voted to take over the operating budget. Today the Howe Corporation, a non-profit organization with over 200 members, provides financial, volunteer and advocacy support for the Library. The Trustees of the Corporation make decisions regarding financial matters of the Corporation. The Town is responsible generally for policies and funding relating to operational matters. The Library develops two budgets: one for the Board of Selectmen and one for the Howe Corporation. Decisions relating to technology are made in the budgeting processes of both the Selectmen and the Trustees.

Staff members developed the Technology Plan for Howe Library with input from Trustees. The Board of Trustees approved the original Plan in 1998 and the update to the Plan-1999 - 2001 in 1999.

Background on Technology

Howe Library's purpose in the use of information technology is to provide electronic resources in a seamless learning environment to educate, enrich, entertain, and inform the community we serve. For almost one hundred years, the Library has provided the citizens of Hanover with access to materials and information, and assistance in the use of these resources. Today Howe Library's task is to continue to be a source of open public access through available information media, both traditional and emerging technologies, and to offer expert guidance to users.

Technological change affects all aspects of contemporary life at the end of the twentieth century. Rapidly evolving technology has a significant impact on how we learn, on how we use information, and on how we communicate with others. High-speed communications bring us ever closer together and raise expectations that the information we need should be available to us in our community from wherever in the world.

Planning for technological change is of vital importance for all institutions. In the planning process, the public library has a special responsibility to provide public access to ensure that society and our communities are not segmented into those with and those without information. This equality of access is a basic principle of public libraries whether applied to traditional collections and services or to new technologies.

In crafting a technology plan for the next three years, Howe Library is guided by its mission statement and by the Board approved long-range plan for the future of the Library. The mission statement sets forth the Library's overall purpose and the selected roles detail the ways in which the Library fulfills its mission to the community. The long-range plan, updated in 1999, presents strategies that will move the Library forward into the twenty-first century based again on the mission and roles of the Library. This technology plan, for 1999 - 2001, addresses both documents in terms of the place of technology in implementing the long-range plan and in achieving the Library's mission.

Basic concepts regarding the role of technology and the significance of Howe's tradition of public service are clearly described in the long-range plan. Concerning technology the long-range plan states: "The Library uses the tools of technology to improve and expand collections, services, and access to information for the community. Technology is not an end in itself, but rather a means to better fulfill the needs and interests of Library users." The challenge is to seamlessly integrate electronic resources with other traditional, but very important, resources to provide the best possible service to the community. In so doing, the library aims to make use of proven resources, rather than being "on the cutting edge."

Concerning Howe's tradition of service the long-range plan states: "A characteristic feature of Howe often noted and appreciated by Library users is the personalized service offered by the staff. The tools of technology allow the staff to offer to the public new and better services with the friendly and welcoming atmosphere that has been a hallmark of the Library. Achieving a balance between the benefits of technology and the personalized service prized by the community is of prime importance." Both of these concepts are important underlying themes of Howe Library's approach to technology.

Allocations required to implement elements of the technology plan will be considered in the course of the annual budget process. The Selectmen and the Trustees will make funding decisions in their respective budgets.

Following the Long-Range Plan and the Master Facilities Plan, the Library is engaging an architect for preliminary designs for remodeling or new construction. Technology in all forms will be an integral part of this planning process. Since the future directions are not yet known, the recommendations in this plan are as specific as possible. General guidelines for including technology in remodeling/new construction were outlined in the Master Facility Plan, 1997, by Aaron Cohen Associates. It is recommended that an expert in the field of technology be retained to advise the staff and the architects.

Sections of the technology plan are a) the role of technology at Howe Library today; b) technology planning for the future: assessing trends; and c) the relationship of Howe's service goals to technology objectives.

II. The Role of Technology at Howe Library Today

Technology is fundamental at Howe Library today. While most members of the public place high value on the traditional library elements of books, librarians and library buildings, an increasing number expect the additional benefits of speed, power and customization that technology allows. In fact, today's technology infrastructure supports the goal of a seamless learning environment where the customer is unaware of a separation between traditional and innovative library services. As illustrated by the following present-day service examples, Howe Library is opening a world of possibilities.

Public Services

- *Twenty-four hour access.* Computers and telephone lines are operating 24 hours a day, providing service when no library staff members are working.
- *Knowhowe, the online catalog.* This database of library holdings is directly accessible at Howe and Etna libraries, and through modem lines or the Internet. The user can not only locate library materials, but also reserve a desired item or request a purchase. In 1999, WebPac, the web-based version of the catalog of Howe and Etna Libraries, was introduced. This enhancement allows users to access KnowHowe in the familiar web browser format.
- *Circulation of library materials.* Innopac, the library's integrated automation system, manages the complex interplay of check outs, renewals, check-ins, and holds as one of its comprehensive functions. A cardholder may obtain a list of items currently borrowed and may extend a loan period. A single Libraries of Hanover card allows ease of use of the whole system, regardless of whether the borrower registers at Howe or Etna Library.
- *Magazine and newspaper articles and indexes.* A vast periodical index by EBSCO allows one to search for articles (much in full text) indexed in thousands of journals. The EBSCO index is available either via Howe's website or KnowHowe, the online catalog.

- *The Howe website.* Howe's image on the Internet offers an expanding variety of services, including an annotated list of recent acquisitions, current program information, links to great Internet sites selected by library staff, and easy access to the Knowhowe catalog services and the magazine index. Howe publishes program information first on the Library's website and the local online community calendar. Print versions follow from the online publications.
- *CD-ROM resources.* Tax forms, Books in Print, encyclopedias, and software for children are among the many CD-ROM resources available at Howe. Many are available to check out for home use.
In-house Internet access. Library users can link to millions of computer files and databases worldwide. The library also provides an important training ground for library users in this fundamental modern skill.
- *Reference databases.* Networks connecting the library with computers worldwide are the most critical facet of present day technology. Networking is an effective and efficient way to distribute services to many, thereby leveraging dollars. Networks such as the New Hampshire Automated Information System and OCLC's First Search enable Howe Library to enlarge its collections by accessing resources provided by libraries and institutions elsewhere. Local databases such as the Obituary Index, the Community Information File, and the Community Calendar provide valuable information for staff and customers. The New Hampshire Automated Information System (NHAIS) is linked from the library catalog for direct public access.
- *Collections.* Innopac, the library's integrated automation system, allows us to gather data to produce statistics and reports that assist in managing and maintaining the library's collections for its users. The staff regularly reviews the statistics and reports to ensure that they are collected as efficiently as possible, and that they supply the necessary data for Library operations.

Technical Services and Systems

- *Acquisitions and cataloging.* The Innopac system is the backbone of all fundamental library technical operations such as ordering and cataloging new items and discarding old ones.
- *Library network architecture.* The Technical Services Department manages all the computer hardware and software interrelationships that work together to provide Howe Library's technological services and operations.
- *Library consortium.* The Technical Services Department manages the technical aspects of the consortium.
- *Year 2000 Planning.* The Head of Technical Services and Information Systems at the Library chairs the Town-wide Y2K Committee which is charged with responsibility for planning and executing activities relating to Y2K preparedness.

Administrative Services and Public Relations

Howe Library staff rely on a wide variety of technical tools such as word-processors, data bases, spread sheets, page design software, presentation software and hardware, web page

editors, and functions of the Innovative system for most of its administrative and public relations work, including:

- Patron record maintenance
- Accounting
- Management reports
- Inventories
- News releases, posters, brochures, flyers
- Web publications
- Miscellaneous databases such as the volunteer personnel list and the corporation membership
- Presentations, meetings, and workshops

Community Cooperation

- *Etna Library.* Howe and Etna now share the Innopac automated system and a single library card. Users connecting to KnowHowe may find that a title unobtainable at one library may be available at the other, thereby increasing effectiveness at both libraries. A courier system has been established to move materials between the libraries.
- *The Upper Valley Events Calendar.* This new one-stop source for happenings in the Upper Valley is a joint venture sponsored by Howe Library, ValleyNet, the Montshire Museum, and Dartmouth College.
- *Hanover website.* Howe staff develop and maintain the website for the Town of Hanover. The website includes information about town departments as well as calendars and minutes of boards and committees.
- *E-mail and interest group connections.* Use of these tools helps to establish and maintain relationships with community cultural/educational/social agencies and organizations that complement Howe Library's mission and goals. Library staff are able quickly to learn about new and emerging resources and to utilize the expertise of others. For example, Howe users profit in many ways from the library's close association with ValleyNet, a local, non-profit Internet service provider.
- *Dartmouth College Catalog.* Thanks to a cooperative agreement with Dartmouth, Howe is able to provide access to the college online catalog directly through KnowHowe.
- *Hanover School Libraries.* School libraries access the online KnowHowe catalog and Hanover High School anticipates dial-in access to their catalog in 1999. Howe will link to the HHS catalog from the KnowHowe catalog and from the Library website.

III. Technology Planning for the Future: Assessing Trends

The overriding theme connecting all technology planning and development at Howe Library is the goal of a seamless learning environment. Technology is vital to the library's mission of bringing together people, information, and ideas. Already the library serves as

a gateway to information at local institutions, from all levels of government, and from points throughout the world. Advancements in technology will allow a smoother integration of electronic sources with older print, audio and video resources, and make them readily available anywhere in the community. Effective planning for this eventuality involves assessment of future trends. While we cannot say with assurance how technology will develop, we can look at the past few years and select trends that seem likely to continue.

Technological Trends Affecting Howe Library Service Goals

- **Some types of information, especially timely government, reference, or business data, will increasingly be available only in privately published, electronic, nonprint formats.**

Implication for Howe Library: For example, as the largest publisher in the world, the federal government now issues much information only in electronic form. Much of this information has been reformatted and distributed by private publishers. Steep fees for these databases often prohibit individuals and organizations from purchasing them, leaving the public library to assure access for the ordinary citizen.

Implication for Howe Library: The library will need increasing numbers of user workstations for the printing and downloading of electronic information. Many of these services involve images, maps, or large databases, requiring powerful workstations.

Implication for Howe Library: The library must join with other public interest advocacy groups to assure access to information for all.

The rapid pace of hardware, network and software development will continue.

Implication for Howe Library: Enhancements will allow for the development of a common graphical user interface for all electronic services, greatly increasing ease of use and access to library resources. The introduction of WebPac in 1999, the web-based version of the KnowHowe catalog, provides this common graphical user interface for library resources.

Implication for Howe Library: The library will need to allocate funds regularly for software and hardware upgrades, for the purchase of more network bandwidth, to purchase additional processing power, and for ongoing user and staff training.

- **The amount of information (both useful and useless) that is available on the Internet will continue to increase exponentially, tending to bury even the most efficient and savvy users.**

Implication for Howe Library: The library will continue to provide personal assistance and will continue to develop effective tools to help citizens manage the proliferation of information services.

There will be continuing inequity in distribution of computing devices and software.

Implication for Howe Library: Technology will continue to change, making learning about it a lifetime endeavor. The library will become ever more the teacher.

Implication for Howe Library: As technology changes the library will seek to provide the most up-to-date capabilities possible so users can access emerging resources that require a powerful computing environment beyond the reach of most personal computer owners.

- **Wireless networks will continue to evolve, on-demand software will become affordable, and end-user devices will be more portable, allowing technology to be increasingly mobile.** The computer, the telephone, the television, the fax machine, the scanner, the copy machine, the video camera, the telemetering device, and the personal locator will all be embodied in one "electronic office" machine. By 2001, it is estimated 38,000,000 personal digital assistants will be in use worldwide, and 7,000,000 American individuals and businesses will subscribe to wireless data systems.

Implications for Howe Library: More users of the library's collections will bring devices with them, expecting network connectivity. Wireless transmitters will become part of the library infrastructure; enabling users to take computers along when consulting the library's print resources.

Inter-institutional cooperation via networks will become a financial necessity

Implications for Howe Library: The library should continue to cooperate with other local institutions, such as the schools, Dartmouth College, and the Town of Hanover, to enable borderless and rapid connections for sharing of resources and for a cooperative learning environment.

Non-Technological Trends Associated with Technology

Societal trends not usually associated with technology do affect library technology planning. Some of the more important of these are:

Sales of books are very strong.

Implications for Howe Library: The library should continue to purchase most categories of books at the same or at an increasing rate. Reductions in print purchases are more likely to be in the areas of reference works, where discrete units of information are ideally suited to retrieval by computer.

Howe circulation statistics indicate continued demand for library materials.

Implications for Howe Library: A large portion of the library's technology will still be devoted to materials circulation and record keeping.

- **Traffic congestion and parking remain town-wide issues.**

Implications for Howe Library: Continuing emphasis will be placed on technology to deliver services to home, office, or school, thus reducing travel and enhancing convenience. Such technology also improves access for handicapped persons, saves fuel costs and reduces air pollution caused by vehicles.

IV. The Mission of Howe Library and Long Range Technology Objectives

Howe Library Mission Statement:

As a vital Hanover institution, Howe Library brings together people, ideas, and information. We encourage everyone to read and enjoy the resources we offer.

Service Goals for Howe Library:

- **Provide materials responsive to users' interests.**

The needs of our users of all ages are becoming more sophisticated and their expectations will continue to rise. Howe's collections will be made up of materials in a variety of formats on our shelves and electronic links to information beyond the library walls.

a. Objective: Enhance functionality and scope of online catalog and associated databases and files and other electronic services for ease of access to information for users and staff. Howe regularly upgrades the Innovative system, as releases of new enhancements become available. WebPac user interfaces have been modified and upgraded for greater ease of use. The Library will investigate the use of an entry in the cataloging record to link materials in the Library's online catalog to resources on the World Wide Web.

b. Objective: Develop a common graphical interface for all electronic services. The introduction of WebPac in 1999, the web-based version of the KnowHowe catalog, provides this common graphical user interface for library resources. The web-based versions of the EBSCO magazine index and the First Search databases are linked to WebPac thereby providing a common graphical interface for these services.

c. Objective: Extend a full range of electronic services to persons with disabilities while also making traditional services as accessible as possible.

d. Objective: Expand the scope and functionality of the library's website. The website provides the one-stop access point for customers to the Library's catalog, to electronic sources, to the Howe new book list, and to Internet links to sites about books and reading.

e. Objective: Notify customers of books on hold, overdue, etc. via electronic mail

- **Deliver comprehensive reference and information services.**

Library users expect timely, accurate information to be available from sources located both within the library and around the world.

a. Objective: Increase and enhance electronic reference services available to the staff and public and provide guidance in their use. The web-based versions of the EBSCO magazine index and the First Search databases now provide enhanced reference services to staff and users accessing the collections through the Internet. Additional PCs for public use in the Library will be added in the 1999-2000 budget year to bring enhanced services to customers in-house. The Library will continue to update CD-ROMs, such as IRS forms and publications, for reference service.

b. Objective: Improve electronic access to document delivery and Interlibrary Loan services.

c. Objective: Expand the scope and functionality of the library's website. Staff members regularly update Internet links to reference sources and community information. The website will become a valuable avenue of communication between the public and the Library as Howe moves into a building program and development campaign. Consider promoting existing electronic mail access on the website to highlight availability for reference questions, interlibrary loan, new book requests, etc. Use the website to gain customer response to Library programs and services through interactive surveys.

- **Serve children and parents to encourage their interest in reading and learning.**

Today's children are more computer-literate than ever before. Electronic resources can provide access to information, opportunities for learning, and introduction to reading.

a. Objective: Enhance electronic services to children. CD-ROM selection criteria and use in the Library have been evaluated. The terminal has been reconfigured and a CD changer will be added in 1999.

b. Objective: Enhance resources for children and parents on the library's website. Resources for children and young adults available on the World Wide Web are many and

varied. As with resources for adults, the Library can perform a valuable service by selecting and evaluating good sites for these age groups.

- **Support schools and independent learning.**

The Library supports students of all ages in meeting educational objectives during formal courses of study or during pursuit of independent study.

a. Objective: Provide the public with electronic tools to assist them with independent learning.

b. Objective: Provide additional Internet access points, communications, and word processing stations for the public.

c. Objective: Provide training for the public on electronic tools and resources.

- **Promote area library cooperation and resource sharing.**

Cooperation and networking extend the services and resources available to library users.

a. Objective: Continue to strengthen the consortium with the Etna Library to better serve all of the community. The new Libraries of Hanover card emphasizes the existence of the consortium as does the WebPac version of the catalog which notes that it is the catalog of the Howe and Etna Libraries. The volunteer run courier system between the two libraries provides an important feature of the consortium.

b. Objective: Enhance networking with other educational institutions in the community--the Hanover public schools and Dartmouth College.

c. Objective: Cooperate with other libraries, governmental units, businesses and organizations to improve service to the community. Promote interagency cooperation at all levels in the community. Build on the momentum of the Centennial Celebration activities to continue public relations efforts for the Library's services and for the Library's cooperative programs with community groups.

d. Objective: Expand the scope and functionality of the Town of Hanover website in cooperation with other Town departments.

Support for the Service Goals of Howe Library:

- **Provide the best public service to our community with competent, welcoming staff who value personalized service.**

An important aspect of technological change in libraries is the integration of technology into all aspects of library service. Howe Library users may come in person, or contact the

library by telephone or electronically via the Internet. In all cases, we must have staff prepared to meet their needs.

a. Objective: Identify and provide training for staff to be proficient in the use of electronic resources. Regular training for all staff updates skills with existing resources and introduces new resources such as WebPac. Staff members participate in training sessions at NHSL, with consultants at the Library on various resources and software, and with in-house training by Library staff. Professional development for various staff members depends upon the nature of their responsibilities. It includes training in systems management, web management, Internet, subscription databases, new releases of the Innopac system, and software for office functions.

b. Objective: Implement a program to enhance the use of technology by staff in their daily work roles. Staff members have access to PCs with Internet capability and email at the public desks and in the staff work areas. A networked printer has been provided for the terminals in the work area. Web versions of the staff procedures manual and the emergency procedures manual, including disaster planning, were put online in 1998. Town-wide software for office functions including email, word processing, and database management, will be implemented in 1999. The Library continues a longstanding practice of maintaining a log for hardware and software problems to keep efficiency up and repairs down, as well as an updated inventory of hardware and software. This information also feeds into the replacement schedule for hardware and software.

c. Objective: Improve internal and external customer support. Technical support is vitally necessary and needs to be increased and standardized so staff can plan on having assistance when needed. The reference staff provides customer support for those accessing the Library's services. Referrals are made to the customer's ISP when necessary. Training session for the public are hosted by the Library in cooperation with the local non-profit ISP, ValleyNet. Individualized help sessions are available from the reference staff and from trained Library volunteers.

- **Provide a wide variety of technological tools to administrative departments that support the Library's service goals.**

Efficient and effective utilization of electronic resources "behind the scenes" is a key element in attaining the Library's service goals.

a. Objective: Plan for future capital projects for electronic systems. This planning is in place through an agreement by Selectmen and Library Corporation to set aside funds for capital projects. The Capital Improvement Program 1998 - 2003 includes proposals for funds (to be voted on annually) to expand the integrated automated system and other hardware and software. (See Appendix)

b. Objective: Enhance management information systems to improve support of service goals. The staff regularly evaluates the reports and statistics for Innopac and web use and integrates those with other performance measures.

V. Implementation

Timeline:

Accomplishments since the 1998 Technology Report

- Communications lines have been converted to higher speeds as required for transmission of information and graphics.
- The number of public access terminals with availability of access to Howe's databases, including CD-ROMS, and those on the Internet has been expanded. *(to be added mid-1999)*
- Networked PC for administration of Circulation Services has been provided.
- Sufficient hardware and software for production of publications and presenting training programs were purchased in 1998.
- Planning has begun for the scheduled replacement in five years of the new automation hardware.
- Networked print server for most public PCs provided in mid-1999.
- WebPac software for the Library's catalog brought online in April 1999.
- Security systems installed on most public PCs.
- Public link to NHAIS on the Library's catalog.
- All Library calendar and public relations information published on the Howe website and on the local online Community Calendar.

1999 - 2000

- Continue scheduled replacement/upgrades of hardware and software.
- Continue process of creating a more efficient internal network.
- Continue staff training by attendance at workshops/conferences, in-house training by staff and by hired consultants. Continue to offer training for the public in cooperation with ValleyNet and hired trainers.
- Study impact on library service of new technologies such as the e-book, and the proliferation of e-commerce as more businesses and their customers move in these directions.
- Synchronize potential building expansion with technology needs for larger facility. Planning for technology will be a major feature of any remodeling or new construction.
- Engage a technology expert to advise the staff and the architects on specific technology needs and planning.

2000-2005

- Implement scheduled replacement/upgrades of hardware and software. This includes replacement of the hardware for the integrated automation system by Innovative

Interfaces, Inc. and the possible migration to a new software package (Millennium) which provides a seamless environment for electronic sources. This process was begun with the purchase of WebPac in 1999, see above.

- Expand the number of online public access terminals. Several PCs were added in 1999, and others will be added during this time period. The specific floor plan and square footage increases of an expansion of the Library will dictate needs for additional terminals.
 - Study new technologies such as personal digital assistants and voice recognition terminals to evaluate the impact they would have on service goals.
 - Provide scheduled technician time to upgrade and maintain systems and software. A Manager of Information Systems for the Town will be hired in the 1999-2000 budget year to administer this area on the management level for all Town departments. The Library will continue to need the time of a technician. Scheduled time weekly, in addition to the present "on-call" status, would be preferable.
- Study self-checkout options in connection with remodeling or new construction.

Budget

Two major sources of funding for Howe Library are the Town of Hanover and the Howe Library Corporation. The Town provides operating costs such as staffing, collections, and maintenance of the building. The Corporation provides capital and collection enhancement. In major capital projects both institutions have cooperated to work out an acceptable ratio of funding. The capital project for replacement of the Innovative system is included in the Capital Improvement Program of the Town and is recommended for inclusion in the Corporation capital budget under development.

Project applications for potential grant awards such as the Federal Library Services Technology Act funds will be considered.

VI. Evaluation

- Conduct periodic computer services customer satisfaction surveys and/or hold focus groups. Implement suggestions as feasible.
- Reevaluate regularly staffing and support needs in technical services and information systems.
- Review annually by the Management Team and Staff the progress toward meeting goals in the Technology Plan.
- Refine statistics annually for use as performance indicators. Use with other evaluation results.
- Report annually to the Board of Trustees of the Howe Library Corporation and to the Town of Hanover Board of Selectmen.

1985 1 "PC"			Apple computer
1986? modem	P		NH State Library connection
1986 1 Mac			Mac for PH's use in PR
1990? 1 Mac	C		Mac SE + scanner ; in Circ Office
1991? 1 hub			original hub
1991? 1 relay box			NW corner of Tech Services
1991? wiring			original wiring for computers
1991 1 PC	P		Tandy laptop for AT (PH sold to AT personally)
1991 Winnabago			Circulation and cataloging
1991 1 PC			Novell Server for Winnabago, Word perfect, etc.
1991 4 PCs			Circ 1, 2, 3 and Low Desk
1991 1 PC			Workroom and backup tape drive
1991 1 PC			Tech Services
1991 1 printer			Tech Services
1992 1 PC	T?		Workroom Office Manager
1992 1 PC			Juvenile Desk
1992 modem			VT State Library connection
1993 BT Link			Acquisitions software
1993 1 PC	T		Tech Serv PC2 added
1993-1994			Appraisal of Winnabago done by 2 Task Forces & 1 commi
1993-1994			Unanimous decision to replace Winnabago with Innopac
1994? 1 Mac	G		Gift ; used by PG
1994 1 PC			Director's PC added
1994 1 printer			Director's printer added
1994 1 PC			Ref 1 PC added
1994 recon	C		Recon cataloging part 1
1994 furniture	C & T		Computer furniture for OPACs & Adult PC
1995 ***	C & T		Innopac components delivered and installed
1995 1 PC	C & T		Novell Server replaced
1995 recon	C		recon cataloging part 2
1995 1 relay box	C & T		2nd box added (NW corner)
1995			Winnabago and Innopac running concurrently for circ and c
1995 2 dial-ins	C & T		2 direct dial-in lines added for patron use
1995			Winnabago crashed therefore solo on Innopac
1995 wiring	C & T		new wiring done in SE corner of Tech Serv
1995			PC routed to Workrm - MH desk
1995 2 printers	C & T		2 receipt printers added at Circ
1995 2 printers	C & T		2 printers added to OPACs

Technology History at Howe

1995		Staff internet access begun
1995	C & T	6 OPACs available for patrons
1995		Acquisitions partially up on Innopac
1995	C & T	Magazine Index
1995		Gateways up for access to Magazine Index
1995	1 PC	Sun UNIX (used) added
1995	C & S	Adult PC added
1995	C & S	For Adult PC
1995	1 printer	Tech Serv PC2
1996		Serials up on Innopac
1996		Etna Library began prep work for Innopac
1996		Telnet access available for patrons to connect to Innopac
1996	T?	Juv PC with CD ROM added
1996	T	Climate control added in Tech Services
1996	T	SE corner of Tech Serv hub replaced
1996		New wiring (Ref)
1996	T?	Ref 2 PC added with 7 disk CD ROM changer
1996	T	Adult PC printer & Snappy software
1996	2 PCs	Circ 2 & 3 replaced
1996		PC routed to Tech Serv PC 3
1996		PC routed to Tech Serv PC 4
1996	T	Circ 2 & 3 receipt printer
1996	2 switchbox	For OPAC printers
1997	1 PC	Toshiba laptop for PH ; owned by PH
1997		Etna circulating online
1997	C	Ref 1 & 2 share a printer
1997		Howe homepage separated from Hanover homepage
1997	C	EBSCO full text magazine index available
1997	T	Sinkhole 1 replaced
1997	C	Wkrm Office Manager PC replaced
1997	T	Juv Desk PC replaced
1997	C	Director's PC replaced
1997		PC routed to Sinkhole 2
1997	C	New wiring - circ, wkrm, juv areas
1997	T	NW corner of Tech Serv. hub replaced
1997		Modem replaced for Valley Net
1997	T	Added to Tech Serv. PC 3
1997	C	Ebsco purchased under State contract
1998		Public PC for word processing set up (Adult PC2)

Technology History at Howe

1998 N. Server	T	Novell Server replaced
1998 1 printer	C	Wkrm shared printer & external print server set up
1998 2 bc scan.	T	2 bc scanners replaced at Circ
1998 1 laptop, etc	C	1 laptop, printer, and document scanner for Asst. Dir.
1998 1 rct printer	T	1 receipt printer replaced at Circ
1998 1 PC	T	Ref 1 PC replaced
1998 1 PC	C	Workroom 1 PC purchased
1998 1 UPS	T	Innopac UPS replaced
1998 1 PC	G	1 public email PC added
1999 1 CD chgr	T	Ref CD ROM changer replaced
1999 1 printer	C	Director's printer replaced, doc. scanner added

C	Corporation
G	Gift
P	Personal
S	State
T	Town

Current Hardware in Use Howe Library 1999

Terminals (repl. 5 yrs., 4 best)

C,G,S,T	Purchase Date	Purchase Price	Repl. Date	Repl. Price	Equipment	No inflation
?	3/29/91	\$4,150	1996	\$1,500	Everex 486/33 Novell Server-TSPC1	
?	8/29/91	\$2,050	1996	\$1,500	Everex 386/25 Circ1-2-3-Low Desk-AdultPC5	
?	8/29/91	\$1,225	1996	\$1,500	Aamazing 286/SX Circ2-TSPC3-Circ3-TSPC3-TSPC4- Adult PC3-Circ1	
?	8/29/91	\$1,225	1996	\$1,500	Aamazing 286/SX Circ3-TSPC3-Wkrm4	
T?	[7/92?]	\$1,715	1997	\$1,500	NPC 486 WkrmJG-Adult PC2	
?	7/5/92	\$1,490	1997	\$1,500	NPC JuvDesk-Wkrm2	
T	7/93	\$1,000	1998	\$1,500	Swan V3-B TSPC2-TSPC3	
G	9/93	gift	1998	\$1,500	Ambra/Acer Adult PC4	
?	8/94	\$2,150	1999	\$1,500	Zenith Z-400+ Ref1-Circ Lowdesk	
C & T	6/7/95	\$3,570	2000		*6 Wyse dumb terminals (\$595 ea) OPACs	
C & T	6/95	\$6,733	2000	\$1,500	Compaq Prosignia VS Model 1050 Novell Server-TSPC4	

Current Hardware in Use Howe Library 1999

B

C & S	12/95	\$3,010	2000	\$1,500	NEC Ready 7020 Adult PC1
T?	5/24/96	\$2,854	2001	\$1,500	Compaq Prolinea 5100e Ref2
T	5/24/96	\$1,905	2001	\$1,500	Compaq Prolinea 575e Circ3-Circ2
T	5/24/96	\$1,905	2001	\$1,500	Compaq Prolinea 575e Circ3
T?	5/24/96	\$2,425	2002	\$1,500	Compaq Prolinea 5100e Juv PC
C & T	10/14/96	pkg	2001	\$32,195	*DEC 3000 Innopac
T	10/25/96	\$2,689	2001	\$1,500	NEC Ready 7020 TSPC2-Wkrm3
C	7/24/97	\$2,042	2002	\$1,500	Dell P200/GS+L Base Director
T	7/24/97	\$2,042	2002	\$1,500	Dell P200/GS+L Base Juv Desk
T	7/24/97	\$2,072	2002	\$1,500	Dell P200/GS+L Base Sinkhole1-TSPC2
C	7/24/97	\$2,092	2002	\$1,500	Dell P200/GS+L Base Wkrm5
T	6/15/98	\$5,772	2003	\$6,000	HP NetServer E50 TS Novell Server
C	8/6/98	\$2,750	2003	\$3,000	Dell Inspiration TS 30H Asst. Dir.

Current Hardware in Use Howe Library 1999

T	10/98	\$1,550	2003	\$1,500	Quantex Ref1
C	10/98	\$1,550	2003	\$1,500	Quantex Wkrm1
T	7/99	\$3,000	2004	\$3,000	2 Adult OPAC PCs
T	7/99	\$1,500	2004	\$1,500	1 Circ1 PC repl.
C	7/99	\$1,500	2004	\$1,500	1 Ref1 PC repl.
Printers (repl. 5 yrs., 4 best)					
T	?	\$1,900	1994	\$1,000	HP LaserJet IIIp Town Office-TSPC1-Wkrm5
G	1993?	gift	1998	\$300	IBM ExecJet II by Lexmark 4076 Adult PC4
?	6/94	\$108	1999	\$300	Okidata OL 400e Dir-Assst Dir
C & T	6/7/95	pkg	2000	\$1,580	*Okidata Microline 395 Innopac System Printer
C & T	10/95	\$335.77	2000	\$350	Seiko DPU-411 receipt printer Circ1
C & T	8/95	\$299	2000	\$300	Okidata Microline 184 turbo printer OPAC1&2
T	5/96	\$345	2001	\$300	*Epson LX-300 Dot Matrix OPACHand
T	5/96	\$340	200	\$300	*Epson LX-300 Dot Matrix

Current Hardware in Use Howe Library 1999

OPACS3&4					
T	12/7/95	\$299	2000	\$300	HP Deskjet 600 TSPC2
C & S	12/95	\$899	2000	\$800	HP Laserjet SP Adult PC1
C	4/8/97	\$312	2002	\$300	HP Deskjet 694C Ref
C	7/98	\$779.00	2003	\$700	HP Laserjet GPXI C4213A Wkrm shared
C	7/98	\$311	2003	\$300	HP Deskjet 722C Asst. Dir.-Wkrm3
T	8/98	\$290	2003	\$300	Citizen iDP-3540F-40PF Paralle Circ2
C	3/99	\$399	2004	\$400	HP Laserjet 1100A Dir
C	7/99	\$700	2004	\$700	Printer for shared public PCs
Bcscanners (repl. 3 yrs.)					
T	11/93	\$1,400	?	\$275	Spectra-Physics SP300 Plus TSPC1-TSPC2-TSPC4
C & T	6/7/95	\$2,150	1998	\$275	*Percon B181 Circ
C & T	8/8/96	\$2,150	1998	\$275	*Percon B181 Circ-TSPC1
T	7/98	\$275	2001	\$275	Cipher 1021 Circ2

Current Hardware in Use Howe Library 1999

T	7/98	\$275	2001	\$275	Cipher 1021 Circ1
External modems (repl. 3 yrs.					
C & T	6/7/95	\$750	1998	\$150	*Hayes 14.4 Innovative (0730)
C & T	6/7/95	\$750	1998	\$150	*Hayes 14.4 Innovative (0731)(Etna)
C & T	7/95	\$122.45	1998	\$150	Hayes 14.4 Innopac (0733) public direct dial in
C & T	7/95	\$122.45	1998	\$150	Hayes 14.4 Innopac (0734) public direct dial in
T	11/97	\$114.90	2000	\$150	Motorola Modem Surfer 56K TSPC3
Switchboxes (indefinite)					
?	?	?	none	\$50.00	Belkan A/B TS-OPACHand&1-Circ2&3-OPACS2&3
T	8/95	\$25	none	\$50.00	Belkan A/B OPACS3&4
G	4/97	gift	none	\$50.00	Generic switchbox Ref
UPS' (repl. 5 yrs.)					
T	6/15/98	\$389	2003	\$389	APC Smartups 700 TS Novell Server
	10/98	\$795	2003	\$795	APC Smartups 1400 Innopac

Current Hardware in Use Howe Library 1999

Hubs (Indefinite)				
T	5/10/96	\$415	none	\$300
				Boca Hub 24 Plus TS
T	9/10/97	\$298	none	\$300
				Boca-Net 24 TS
Relay Boxes (Indefinite)				
C & T	7/95	? none	?	Siemon Co. TS
C & T	8/95	? none	?	Siemon Co TS
Odds				
C & T	6/7/95	pkg.	2000	\$2,775
				*Expansion cabinet Innopac
C & T	6/7/95	pkg.	2000	\$2,823
				*Lantronix ETS16 Innopac
C & T	7/19/96	pkg.	2000	\$2,677
				*DAT drive Innopac
C	7/98	\$185	?	\$200
				HP Jetdirect J2592A external pnt serve Wkrm shared printer
C	7/98	\$299	?	\$300
				Visioneer Paper Port doc. scanner Asst. Dir
C	3/1/99	\$369	2003	\$400
				Smart and Friendly CD changer Ref2
C		\$370	2003	
				CD changer for Juv PC

urrent Hardwa

Use Howe Library 99

/99

\$20

etwork pnt sei for publ PCs

**Current Software in Use
Howe Library
1999**

Adobe Pagemaker 6.0
Adobe PageMill
Adobe Acrobat Reader 3.0
Alpha 4 4.0
Anzio Lite 11.3
ArcServe for Windows 5.0
BT Link 22
Corel Suite 8
Danet
DOS 6.20
Ebsco Host 3.1
Eudora
Fast Lynx
Flashback III 3.0
Folio Bound View
Innopac 12
Internet Explorer
Kermit
Marcive
Net Census
Netscape
Novell Netware 4.11
Netware Driver
Norton Antivirus
Norton Utilities
Norton Crash Guard
MS Office 97
Photoshop
Printshop Deluxe
ProComm Plus 2.01
Replica
Telnet
Windows 95 4.00
Windows 98 (95 4.10)
Windows 3.11
Windows 3.10
WinZip 6.3
Win U 4.3
Word Perfect 5.1
Works

Computer Workstations
7/1/99

Public Service Areas				Non-Public Service Areas			
Area	Current	*Future	Additions	Area	Current	*Future	Additions
Circulation				Circulation			
Public use	0			Staff use	2		
Staff use	4						
Reference				Reference			
Staff use		0		Staff use	2	2	
Adult Serv.							
Public use	10		7				
Children's				Children's			
Public use	2		2	Staff use	0		
Staff use	1						
Meeting Rooms							
Public use	0		2				
TOTAL	19	13	32	TOTAL	13	0	18
TOTAL CURRENT	32						
TOTAL EXPANSION							50

*Future additions are recommended in the Howe Library Master Facility Plan, 1997 by Aaron Cohen Associates
List includes multifunctional microcomputers, and does not include peripherals and telecommunications.

Howe Library Corporation Capital Improvement Program

Project	Total Cost	Source	Life	1998-1999	1999-2000	2000-2001	2001-2002	2002-2003	2003-2004
Automated system (III)	\$250,000	Annual Op	20	\$30,041	\$30,041				
Automated system upgrade	\$75,000	Reserve	5	\$15,000	\$15,000	\$15,000	\$10,000	\$10,000	\$10,000
Automated system expansion*	\$23,000	Reserve	5			\$8,000	\$5,000	\$5,000	\$5,000
TOTAL				\$45,041	\$45,041	\$23,000	\$15,000	\$15,000	\$15,000

Howe Library: Town of Hanover Capital Improvement Program

Interior renovation*	\$100,000	Operating	20			\$50,000	\$50,000		
Automated system upgrade	\$75,000	Reserve	5	\$10,000	\$10,000	\$10,000	\$5,000	\$5,000	\$5,000
Automated system expansion*	\$23,000	Reserve	5			\$5,000	\$5,000	\$5,000	\$5,000
Boiler replacement*	\$20,000	Reserve	25					\$10,000	\$10,000
Microform Reader/Print Repl.	\$10,000	Reserve	12		\$5,000	\$5,000			
TOTAL				\$10,000	\$15,000	\$70,000	\$60,000	\$20,000	\$20,000

*May be included in bldg. expansion

HAMPSTEAD PUBLIC LIBRARY

Technology Plan

2000-2002

Contents:

Mission

Goals and objectives

I. Public Services

II. Staff Services

III. Collection Development

IV. Facilities and Equipment

V. Community Relations

VI. Interagency Cooperation

Current Equipment Inventory

Funding

Staffing

Security and disaster plan

Re-evaluation

Mission

The Hampstead Public Library's mission is to provide equal access to all information sources, in traditional formats and emerging technologies, to all the citizens in Town to enrich their lives for education, enlightenment, and entertainment.

Technology and the Mission

This plan addresses the mission in terms of acquiring, organizing and disseminating *electronic* resources that help educate, enlighten and entertain the public. Our patrons' needs are becoming more sophisticated and their expectations will continue to rise. These needs and expectations will translate into demands for more timely information in a wider diversity of formats. Libraries have always provided access to information, but with the proliferation of electronic publishing the issue becomes one of intellectual access over physical access. The collection is now made up of links to information and access to computerized data, as well as items on shelves. The goals and the methods are very much the same.

With recent advances in technology, libraries will be more involved in the development of information resources from the materials that are unique to their collection, particularly historical materials that may be more widely disseminated through digitization. Integrating technology into traditional library service requires that all levels of staff be properly trained and have adequate documentation to assist patrons at the point of need. Training programs in all types of electronic tools and resources are critical in maintaining an informed and competent library staff, for today's technology and for future developments also. Technology can provide cost-effective strategies for managing a wide range of staff duties, freeing up staff time for direct work with the public. Computers can also facilitate library use by persons with disabilities. Investments in new technology need to be followed up with appropriate feedback and evaluation tools to insure that we are serving our staff and patrons in the most effective manner.

Electronic information resources are the new frontier in library services, effectively creating a global community with selection and development for specialized populations. Generally, cost of technology includes cost of equipment and software, cost of subscriptions to commercial data bases and cost of staff time for collection development and link maintenance. The new technologies, services, and resources must be effectively communicated to the public to increase awareness, usage, and support of the library. The Internet and other tools that transparently access data across diverse computer platforms provide new opportunities for cooperation across the street and around the world. These electronic bridges make access to information more affordable and efficient for all involved, and bring the library into people's homes and offices.

Goals and Objectives

Goal for Public Services

Develop, implement and evaluate, the Library's program of electronic resources to provide up-to-date materials and information to people of all ages for their recreation, education, and entertainment.

Objective 1: Evaluate and enhance internal electronic services to provide ease of use and access to electronic resources in the Library.

- Upgrade current CD-ROM and Internet Access computers for faster access speeds. (2000)
- Network the freestanding CD-ROM and Internet computers so that all CD-ROM materials are available at all stations and all stations provide Internet access. (2000)
- Investigate and evaluate various means of providing a children's interface to the WEB, including, but not limited to providing a special children's reference and search page and the possibility of filtering software on the children's computers. (2000)
- Provide a Broadband cable connection from MediaOne to the library building to provide faster service than the current 56k line from Bell Atlantic. (2001)
- Investigate and evaluate means of and requirements for launching the Library catalog on the Internet (2002)

Objective 2: Evaluate and enhance virtual customer service.

- Enhance WEB page development to make the Library's home page a valuable starting point for community information. (ongoing)
- Enhance the Reference page to provide more valuable links to useful information on the WEB. (ongoing)
- Provide pages within the Library home page site for other community organizations to display their information. (2001)

Objective 3: Maximize options for communication between the Library and its patrons

- Investigate possible enhancement of e-mail communication between the Library and patrons for overdues, reserves, programs, and suggestions (example: solicit suggestions for book purchases) (2001)
- Conduct a study of current telephone lines and equipment for voice, fax, and modem to see if they are still adequate for current needs. (2002)

Objective 4: Provide training for the public on electronic tools and resources

- Promote workshops for young people for training in electronic resources (including local youth organizations such as the scouts). (2000)
- Develop an Internet tutorial, both on paper and on the home page, to help a patron access the Internet at the library for the first time. (2000)
- Develop and produce workshops for adults for training in electronic resources in the library, including the catalog, CD-ROM, and Internet. (2001)

II. Goal for Staff Services

Attain and maintain the most efficient and effective utilization of the available electronic resources.

Objective Increase staff efficiency and productivity through the upgrading of hardware and software.

- Upgrade the two 66 MHz computers in the office and at the Circ desk to state of the art. (2001)
- Investigate and evaluate upgrading all staff machines to Windows 2000. (2001)
- Upgrade software to versions compatible with Windows 2000 if installed. (2001)
- Investigate and evaluate office software packages for possible upgrade. (2001)
- Upgrade office software on staff access computers. (2002)

Objective 2: Increase staff efficiency and productivity through training.

- Develop and implement internal staff training workshops on public access systems, to make staff more effective in helping patrons. (2000)
- Develop and implement a program of outside staff development classes and workshops. (2001)
- Develop and implement internal staff training workshops on staff use software. (2002)

III. Goal for Collection Development

Select, organize and maintain a quality collection of electronic materials which will provide a basis for community information, education, recreation and historical preservation.

Objective Expand the Library's home page by continually adding appropriate links to resources.

- Investigate ways to provide access to full-text databases via the Library's Web site. (2000)
- Implement a process for regular review and upgrades to the Reference WEB page. (2001)
- Maintain a robust and comprehensive community oriented Web site. (ongoing)

Objective 2: Convert as many local history resources as possible to electronic format to increase accessibility and help preserve the collection.

- Investigate the feasibility digitizing the local history texts and post them on the Web (ex: Noyes). (2001)
- Evaluate other local history print materials to determine importance for feasibility of digitizing. (2001)

IV. Goal for Facilities and Equipment

Provide technology resources to support the objectives of the Library

Objective 1 : Review computer needs as to the number needed and speed and power of those currently in use with a view to upgrading current hardware.

- Write a computer needs assessment for the second floor expansion. (2000)
- Investigate adding replacement and upgrade funds to the Library budget. (2000)
- Investigate upgrading the two 66MHz computers to faster processors. (2001)

Objective 2: Increase the Library's cabling infrastructure to accommodate the new CD-ROM/Internet network.

- Install cabling to connect all existing CD-ROM and Internet computers and make the 2 CD-ROM computers Internet accessible. (2000)
- Investigate requirements for a network server for CD-ROM/Internet network to centralize the CD-ROM's

and make them available on multiple stations. (2001)

Objective 3: Plan for disaster recovery to protect the Library's investment in data and staff time and to minimize downtime.

--Investigate and install virus protection on the CD-ROM/Internet network. (2000)

--Investigate and implement a backup system for the CD-ROM/Internet network. (2001)

V. Goal for Community Relations

Maintain an effective community relations program which will communicate the availability of electronic resources and promote the Library.

--Provide periodic press releases to local weekly and daily newspapers on various topics of interest to town residents regarding current technology. (ongoing)

--Provide flyers in the Library informing patrons of resources available to them. (ongoing)

--Post regular updates on the home page about activities in the Library. (ongoing)

VI. Goal for Interagency Cooperation

Cooperate with other libraries and governmental units to improve the quality and efficiency of electronic services.

--Promote the use of WinnShare as a resource for Interlibrary Loan. (2001)

--Investigate the possibility of putting the WinnShare database on the WEB.
(2002)

--Investigate the possibility of joining with the Town Offices and the schools in the Intranet provided by MediaOne. (2002)

CURRENT EQUIPMENT INVENTORY

Library Catalog/Circulation Network Hardware:

Server:

Pentium II Processor 400 Mhz, 128 MG RAM, 8 GB hard drive, keyboard, 14" VGA monitor, 16x CD-ROM drive, 3.5" floppy drive, 4 port internal ethernet hub. Operating system is NT 4.0 with 12 client licenses. Includes APC UPS.

Workstations:

Pentium 166 Mhz 32 MB RAM 1.6 Gb Hard drive 4 x 4x CD-ROM tape backup system, VGA monitor, network card, APC UPS.

Other networked work stations (7)

Each machine equipped with a network card, floppy drive, CD-ROM drive, small hard drive, VGA monitor and keyboard.

<u>Machine</u>	<u>Processor</u>	<u>RAM</u>	<u>Peripherals</u>
1. Circ 1	486/133	32	HP LaserJet 6 Printer, Bar Code Scanner 2400 Baud Ext. Modem, Bar Code Wand
2. Circ 2	Pentium/66	32	
3. Cat 1	486/133	32	
4. Cat 2	486/133	32	
5. Cat 3	486/133	32	
6. Cat 4	486/133	32	HP LaserJet 3100 Printer
7. Office	486/66	32	

Internet/CD-ROM Network

Each computer in this network includes a VGA 15" monitor, keyboard, 4x or 16x CD-ROM drive, and 3.5" floppy drive.

W1 (Workroom)	6x86	6 GB Hard Drive	32 Mg RAM
A1 (I-Net)	Pentium 133		32 Mg RAM
*CD-ROM 1	6x86	4GB Hard Drive	64 Mg RAM
**CD-ROM 2	6x86	4GB Hard Drive	64 Mg RAM
***K1 (Children's)	Pentium 133		32 Mg RAM
***K2 (Children's)	Pentium 133		32 Mg RAM
Office 2	Macintosh Performa 500		

*Has a 7 drive CD-ROM tower and an HP DeskJet 540 printer

**Has 4 5-disk 16x CD-ROM disk changers and an HP DeskJet 600 printer

***Has 2 4 x 4x IDE CD-ROM changers

FUNDING (COSTS)

HARDWARE COSTS

- Hardware (including new computers and upgrading of old ones) Usually paid for with private funds. Sources include: Clark Funds (controlled by Board of Trustees), Mother's Club (for computers and software in Children's Room), Friends of the Library (frequent providers of new computers for the Library). Repair and replacement costs are being slowly incorporated into the budget.
- Networking (including cable, hub and network cards for all involved computers): Some funds will come from savings realized from lower telephone costs due to application of the E-Rate. Other funds will come from the sources above for computers.
- Internet connection (including router and modem or modem substitute): Cabletron and MediaOne in their promotions for Library Connections. Budget.

SOFTWARE COSTS

- Network software. Funding from Clark Funds and Friends of the Library
- Work programs. Funding from the Library budget.

TRAINING COSTS

- Staff training. Funding from the Library budget.
- Public training. Funding from the Library budget. Seek grants for producing training programs.

STAFFING

Current staffing is at the level of 3 staff members on duty during all open hours. This is consistent with the Associate level library in the New Hampshire Library standards which requires 3 FTEs in a town of 6,000 to 9,000. Hampstead is now approaching the upper population limit for this level service and must begin working toward 4 FTEs which are required for a population of 9,000 to 12,000.

SECURITY AND DISASTER PLAN

SECURITY

The current Library Catalog/Circulation network is password protected. The CD-ROM/Internet network computers are protected with password security software (I-KIOSK and Fortres101). All CD's are protected in locked cabinets.

DISASTER

The Circ/Cat network has a tape backup system which is run every day after closing. It is also run once a week, and once a year and these tapes are archived off site. All other backups are done with floppies (of files that have changed). The network server is protected by a Universal Power Supply. All others have a surge protector.

CALENDAR OF ACTION ITEMS

2000

- Upgrade current CD-ROM and Internet Access computers for faster access speeds. (2000)
- Network the freestanding CD-ROM and Internet computers so that all CD-ROM materials are available at all stations and all stations provide Internet access. (2000)
- Investigate and evaluate various means of providing a children's interface to the WEB, including, but not limited to providing a special children's reference and search page and the possibility of filtering software on the children's computers. (2000)
- Promote workshops for young people for training in electronic resources (including local youth organizations such as the scouts). (2000)
- Develop an Internet tutorial, both on paper and on the home page, to help a patron access the Internet at the library for the first time. (2000)
- Develop and implement staff training workshops on public access systems, to make staff more effective in helping patrons. (2000)
- Investigate ways to provide access to full-text databases via the Library's Web site. (2000)
- Write a computer needs assessment for the second floor expansion. (2000)
- Investigate adding replacement and upgrade funds to the Library budget. (2000)
- Install cabling to connect all existing CD-ROM and Internet computers and make the 2 CD-ROM computers Internet accessible. (2000)
- Investigate and install virus protection on the CD-ROM/Internet network. (2000)

2001

- Implement a process for regular review and upgrades to the Reference WEB page. (2001)
- Investigate the feasibility digitizing the local history texts and post them on the Web (Noyes). (2001)
- Evaluate other local history print materials to determine importance for feasibility of digitizing. (2001)
- Investigate possible enhancement of e-mail communication between the Library and patrons for overdue reserves, programs, and suggestions (example: solicit suggestions for book purchases) (2001)

2002

- Investigate and evaluate means of and requirements for launching the Library catalog on the Internet (2002)
- Conduct a study of current telephone lines and equipment for voice, fax, and modem to see if they are still adequate for current needs. (2002)
- Upgrade office software on staff access computers. (2002)
- Develop and implement internal staff training workshops on staff use software. (2002)
- Investigate the possibility of putting the WinnShare database on the WEB. (2002)
- Investigate the possibility of joining with the Town Offices and the schools in the Intranet provided by MediaOne. (2002)

Ongoing Items

- Enhance WEB page development to make the Library's home page a valuable starting point for community information. (ongoing)
- Enhance the Reference page to provide more valuable links to useful information on the WEB. (ongoing)
- Maintain a robust and comprehensive reference Web site. (ongoing)
- Provide periodic press releases to local weekly and daily newspapers on various topics of interest to town residents regarding current technology. (ongoing)
- Provide flyers in the Library informing patrons of resources available to them. (ongoing)
- Post regular updates on the home page about activities in the Library. (ongoing)

RE-EVALUATION

The Board of Trustees will review and update this Technology Plan every year.

Chesterfield Library Technology Plan 1999-2001

1. Mission Statement:

The purpose of the Chesterfield Public Library is to serve the Chesterfield community by reaching townspeople of all ages and backgrounds, providing them an opportunity to enrich their lives through print and non-print materials. It will endeavor to help the community enter the world of technology while fostering the concept of life-long learning by providing current, in-depth information services.

The library will provide free access to its materials, services and programs in a variety of formats. The library staff will assist patrons in finding materials and information within the library's own resources, by inter-library loans, and through the New Hampshire State Library network: New Hampshire Automated Information System (NHAIS).

2. Technology Strategic Plan:

The technology strategy for the Chesterfield Library is to meet the following goals by completing the outlined objectives.

Goal: Hardware:

Insure adequate maintenance capabilities are in place for the entire system. Upgrade the librarian's computer in the workroom to provide adequate memory and hard disk space for administrative software.

Objective: Equipment/hardware maintenance

Upgrade to the workroom (librarian's) computer.

Obtain two more computers and network equipment for general public use (Complete May 1999).

Obtain a server to install new automated cataloging software.

Through use, determine appropriateness of installed system.

Determine what security, if any, is needed to protect and maintain entire system.

Research the need for hardware, network and software maintenance contracts.

Create an equipment log for hardware and software problems.

Develop disaster recovery and power outage plans.

Develop plans/budgets to upgrade/replace existing systems over time.

Develop and implement Y2K plan.

Revised Date: May 20,1999

Chesterfield Library Technology Plan 1999-2001

Page 2

Goal: System Utilization:

Train library personnel to utilize the Internet. This will include inter-library use, management of the multiple workstations and guidance of patrons who are not familiar with on-line vocabulary.

Objective: Increase staff productivity through the use of technology.

Secure public computers so they are protected from untrained/mischievous users to control staff time required for intervention.

- Provide ability to easily back up and re-install software for all stations either through staff training or provision of a contracted resource.

Objective: Train staff and educate the public on how to use technology to retrieve the information needed.

Train staff to integrate technology into traditional library services.

Research and schedule training for all library personnel.

Offer training classes in Windows 95, Word, and MS Works.

Identify and provide the training needed to be proficient in the use of electronic services, such as Internet searching, Web site evaluation, e-mail, public access policies and monitoring usage.

Provide adequate documentation to assist patrons.

Determine whether and in what form the library will provide patron training.

Objective: Provide quick easy access to library administrative information while reducing the use of paper.

- Create directories of staff, trustees and volunteers including name, address, telephone, e-mail address.
Provide all personnel and general policies on computer.
Create a building system manual.
Create a directory of standard library forms.
Create a computerized inventory for library supplies.

Chesterfield Library Technology Plan 1999-2001

Page 3

Objective: Use technology to connect to relevant sources outside the library.

Adapt new and changing technology to meet the public's needs.

To promote the library, make the community aware of the availability of electronic resources through the library network.

Develop a library web site as a tool to familiarize the community with library resources.

Research information from community organizations i.e. Town Offices and Historical Society regarding their interest in providing information for the page.

Objective: Evaluate emerging technology for effective responsiveness to the public's needs.

Provide patrons with the ability to make suggestions and give feedback about the technology resources available.

- Continue to track statistics on computer usage.
Survey families in Chesterfield to determine number of homes with computers, ages and use patterns.

Objective: Collection development.

Select, develop, organize and maintain a quality collection of electronic materials.

Investigate the value/timing of adding the ability to use links to Internet resources which are related to the subject matter of the book being accessed in the Winnebago system.

Goal: Automated Catalog and Circulation System:

Automate the library catalog and circulation with a Winnebago system to allow better and more efficient use and administration of the media collection .

Objective: Determine conversion needs for existing cataloging information.

- Install modem on 386 computer for MARC record input.
- Acquire training in Supercat for library staff and volunteers.
- Schedule installation of Supercat system to existing hardware.
Initiate project plan for volunteer program to convert catalog records to MARC format.
Research process required to download MARC records from NH. state system to Winnebago system.

Revised Date: May 20,1999

Chesterfield Library Technology Plan 1999-2001

Page 4

Objective: Install and begin preliminary use of Winnebago system

Schedule installation date and insure all staff available for one day training.
Provide additional volunteer support.

Goal: Network with Chesterfield School and Town Offices:

Network with the Chesterfield School system and Town Offices as a first step towards providing on-line communication with sources outside the library.

Objective: Determine feasibility/interest of networking with school.

Objective: Determine feasibility/interest of networking with Town Offices.

Objective: Determine feasibility/interest of networking with the Historical Society.

3. Plan Justification:

To provide a high standard of public service, libraries must offer a wide range of electronic services to supplement the traditional print services currently offered. These electronic connections make access to information more affordable and efficient. The library can now be accessed in people's homes and offices while at the same time an expanded world of information can be made available to people who come to the library. With the increase in electronic publishing, the library must now provide both physical access to print, audiovisual and electronic resources within the library building and provide intellectual access to electronic resources from wherever the customer is located to wherever the resources are found. This plan presents the current and planned hardware, software and telecommunications necessary to deliver these services.

4. Technology Inventory:

Current:

Hardware:

eight 486 workstations with pentium overdrive processors
five 14" monitors, three 15" monitors
Eight CD Roms
one 56K Winmodem
Two network hubs and associated cables
Four sound cards
one cabletron router with 56K module
one 386 workstation
One printer dot matrix
One Okidata 6e laser black and white
One HP 560C printer ink jet color
One Iomega Zip Drive
One Scanner

Internal connections:

2 voice/data telephone lines
one 56K direct data link
two rooms connected with a total of eight workstations on the network

Software:

- Windows 95 Service Release 2
 - McAfee Virus Scan 3.x
 - Microsoft Internet Explorer 4.01
- Corel Office Suite 7.0 – word processing, spreadsheet, database
Microsoft Word (97) & Works – word processing, spreadsheet and data base
Print Shop – desktop publishing

Chesterfield Library Technology Plan 1999-2001

Page 6

Electrical/Data Systems:

The Chesterfield Library was newly constructed in the 1997-98 time span. The system was planned to handle current and future expansion requirements. Following installation of the existing LAN by Vermont Yankee volunteer computer support people, Chesterfield had the opportunity to participate in the Bell Atlantic offer to install, cost free, a 56K direct data line to the Library. This connection was installed in conjunction with the total system designed and installed by Vermont Yankee.

Funding:

Vermont Yankee donated the networked system now in place at the Chesterfield Library. This includes all hardware listed in the current hardware inventory above excluding the 386 system, dot matrix printer, zip drive and scanner. Sources to fund the ongoing system maintenance for the library will be investigated. If necessary, these costs will be built into the annual operating budget funded by the Town of Chesterfield.

- Determine actual costs required to adequately maintain and operate the existing Chesterfield Library computer system.

Research funding sources to replace Vermont Yankee and Bell Atlantic contributions

Request grant applications where available

Contact other possible corporate contributors in Chesterfield

Evaluation Process:

- Meet quarterly to review progress and assess and make changes as needed.
- Review plan annually in April.
 - Assess developments and opportunities.
 - Reassess goals.
 - Produce report outlining progress, noting changes and listing objectives and tasks completed during the past year.
 - Plan new technology initiatives.
- Revise technology plan.
 - Delete objectives and tasks accomplished.
 - Incorporate revised and new goals, objectives and tasks.

We wish to thank the Portsmouth Public Library, Portsmouth, NH, the Sandown Public Library, Sandown, NH and the Dalton Public Library, Dalton, NH for sharing their Technology Plans through the New Hampshire State Library. They both served as models for the 1999 revision of this plan.